

Table 3. Details for sampling biota and water quality parameters. SOP, standard operating procedure; HETL, State of Maine Health and Environmental Testing Lab.

Parameter	Sampling techniques	Sample area/volume	Sample preservation Maximum holding time	Analysis location	SOP in App. D	Quality Control Procedures
BIOTA:						
Macroinvertebrates	Rockbags	100-m reach	100% Ethanol; indefinite	Field; MDEP - Augusta; taxonomist	i	Check pick 1 in 10 samples; taxonomists maintain reference collections
Algae	Periphytometer, natural substrate	100-m reach	none or M3	Field; MDEP - Augusta; taxonomist	vi	Collect 1 duplicate field sample in 10; taxonomist maintains reference collections
WATER QUALITY:						
Dissolved oxygen	Place Hanna field meter in channel	--	--	Field	ii	Calibrate field meter according to SOP
Specific conductance Temperature (instantaneous) pH	Place Hanna field meter in channel	--	--	Field		Calibrate field meter according to SOP
Temperature (continuous)	HOBO Water Temp Pro	--	--	Record in field; download onto office computer using HOBO Ware Pro v.2.3.0	v	Perform Precision test according to SOP.
Flow velocity (average)	Global flow meter	--	--	Field	iii	Calibrate field meter according to SOP.
Nutrients - TKN - NO ₂ -NO ₃ - NH ₃ - Total-P - SRP	Grab sample	250 ml	4°C; 48 h	HETL	iv, x	Lab: 1 duplicate per 10 samples; spike sample; blank sample; Field: 1 duplicate per 10 samples
- Chlorophyll <i>a</i>		250 ml	4°C; 48 h		iv, xi	
- Chlorophyll <i>a</i>		250 ml	4°C; 24 h		iv, xii	
- Chlorophyll <i>a</i>		55 ml	4°C; 28 d		iv, xiii	
- Chlorophyll <i>a</i>		250 ml	4°C; 48 h		iv, xvi	
Total Suspended Solids	Grab sample	1 L	buffer with MgCO ₃ ; filter within 24 h, freeze filter; 21 d	HETL	iv, vi, xv	Lab: 1 duplicate per 10 samples; blank sample; Field: 1 duplicate per 10 samples
	Grab sample	500 ml	4°C; 7 d	HETL	iv, xvii	Lab: 1 duplicate per 10 samples; blank; Field: 1 duplicate per 10 samples

Table 3, continued

Parameter	Sampling techniques	Sample area/volume	Sample preservation Maximum holding time	Analysis location	SOP in App. D	Quality Control Procedures
Dissolved Organic Carbon	Grab sample	40 ml	Acidify (H_2SO_4), + 4°C; 28 d	HETL	iv, xviii	<u>Lab</u> : 1 duplicate per 20 samples; spike sample; blank; <u>Field</u> : 1 duplicate per 10 samples
Chloride	Grab sample	250 ml	4°C; 48 h	HETL	iv, xix	<u>Lab</u> : 1 duplicate per 10 samples; spike sample; blank sample; <u>Field</u> : 1 duplicate per 10 samples
Alkalinity	Grab sample	250 mL	4°C; 14 d	HETL	iv, xx	<u>Lab</u> : 1 duplicate per 10 samples; blank sample; <u>Field</u> : 1 duplicate per 10 samples
True Color	Grab sample	250 mL	4°C; reasonable time period	HETL	iv, xxi	<u>Lab</u> : 1 duplicate per 10 samples; spike sample; blank sample; <u>Field</u> : 1 duplicate per 10 samples
Sulfate	Grab sample	500 mL	4°C; 28 d	HETL	iv, xxii	<u>Lab</u> : 1 duplicate per 10 samples; blank sample; <u>Field</u> : 1 duplicate per 10 samples
pH	Grab sample	250 mL	4°C; asap	HETL	iv, xxv	<u>Lab</u> : 1 duplicate per 10 samples; blank sample; <u>Field</u> : 1 duplicate per 10 samples
Specific Conductance	Grab sample	100 mL	4°C; 28 d	HETL	iv, xxvi	<u>Lab</u> : 1 duplicate per 10 samples; blank sample; <u>Field</u> : 1 duplicate per 10 samples
Silicon, dissolved silica	Grab sample	250 mL	4°C; 7 d	HETL	iv, xxiii; xxiv	<u>Lab</u> : 1 duplicate per 10 samples; spike sample; blank; check sample; <u>Field</u> : 1 duplicate per 10 samples